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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,032

11/13/2006

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EXAMINER

COLLINS, ALVIN

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,032	<b>Applicant(s)</b> STANJEK ET AL.	
	<b>Examiner</b> Alvin C. Collins	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/018/2008, 06/16/2006</u> .                                 | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 12-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 5, 7-10 of U.S. Patent No. 7,094,859 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reference teaches a crosslinkable polymer blend, comprising at least one polymer A having endgroups  $\text{-L-CH}_2\text{-SiR}^1_a(\text{OR}^2)_{3-a}$ , where the group “L” corresponds to  $\text{-A-}$  and  $\text{R}^1$  and  $\text{R}^2$  are identical, which embraces formula [1] of the instant application. Since the main chain is not claimed in this application, the reference reads on the claimed invention.

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***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites "... an alkoxysilane where at least 50% of the alkoxysilyl groups of the general formula [1] are composed of dialkoxysilyl groups." This renders the claim confusing since general formula [1] has one alkoxysilyl group, which may contain up to three alkoxy groups. The claim is interpreted "...an alkoxysilane where at least 50% of the groups attached to the silicon atom of the general formula [1] are alkoxy groups" for the purposes of the art rejections below.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 12-24 are rejected under 35 U.S.C. 102(b) as being anticipated by (WO 02/018658), translation provided by Schindler et al. US 7,153,923 B2 (hereinafter "Schindler 1").

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7. Regarding claims 12 and 22, Schindler 1 teaches a one-component moisture curing composition in the form of a prepolymer blend, comprising an alkoxysilane-terminated polymer (A) having end groups of the general formula (I), which is identical to formula [1] of the instant application (see col. 2, lines 30-50). The groups "A," "R<sup>1</sup>," "R<sup>2</sup>," and "a" are also identical when taken into account that R<sup>3</sup> may be a hydrogen radical. This reads on claims 12 and 22.
8. Regarding claims 13 and 14, Schindler 1 further defines R<sup>1</sup> as preferably methyl, ethyl or phenyl and R<sup>2</sup> as preferably methyl or ethyl groups (see col. 3, line 14-17).
9. Regarding claim 15, Schindler 1 teaches the preparation of polymer (A) such that the polymer is isocyanate-free (see col. 4, lines 58-64). Example 3 describes the preparation of prepolymer A. The isocyanate group donor is 2,4-diisocyanate (TDI) and is used in the quantity of 141.2 mmol. The isocyanate-reactive groups (methoxy groups) of N-phenylaminomethyl-trimethoxysilane are present in a concentration of 444.9 mmol (148.3 mmol x 3). This ratio turns out to be 3.15, which falls within the range of 1.4:1 to 4:1 as claimed (see col. 7, line 60 to col. 8, line 13).
10. Regarding claim 16, Schindler 1 teaches a prepolymer (A), prepared using an alkoxysilane of the general formula (4), which corresponds to general formula (3) of the instant application where B<sup>1</sup> is represented by "Z", and is selected from an OH, SH or NHR<sup>3</sup> group, and R<sup>1</sup> and R<sup>2</sup>, are as previously defined (see col. 4, lines 25-35).

11. Regarding claim 17, in example 2, Schindler 1 teaches the preparation of N-phenylaminomethyl-trimethoxysilane. This is an example of an alkoxysilane of formula (3) where  $a=0$  and at least two of the groups attached to the silicon atom are alkoxy groups (see col. 7, lines 30-60).

12. Regarding claims 18-22, Schindler 1 teaches a moisture curing composition including the urethane group containing prepolymer preparation from polypropylene-glycerol (polyol) and toluene 2,4-diisocyanate (TDI) (see example 4, col. 8, lines 15-37). The polypropylene-glycerol has an average molar mass of 1500 g/mol, which reads on the polyol having an average molecular weight of 1000 to 25,000. It is also noted that polypropylene-glycerol is a hydroxyl-functional polyether.

13. Regarding claims 23 and 24, Schindler 1 teaches the addition of aminopropyl-trimethoxysilane as a catalysts in example 4, which reads on the composition of claim 22 further comprising a low molecular weight alkoxysilane of formula (3) where B is –NHR<sup>3</sup>.

14. Claims 12-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Schindler et al. U.S. Patent No. 7,060,760 B2, hereinafter ("Schindler 2").

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15. Regarding claims 12 and 15, Schindler 2 teaches a silane-terminated polydiorganosiloxane-urethane copolymer containing the end groups "**B**" [**Z-Si(R<sup>1</sup>)<sub>m</sub>(R'')]<sub>3-m</sub>]. The "**R''**" group corresponds to the alkoxy group and "**Z**" group corresponds to -A-CH<sub>2</sub>. The R<sup>1</sup> group is a monovalent hydrocarbone radical optionally substituted by fluorine or chlorine having 1-12 carbon atoms, which reads on R<sup>1</sup> of the instant application when **A** is -(R<sub>3</sub>)- and a C<sub>1</sub>-C<sub>18</sub> alkyl radical. Schindler 2 also teaches **m**, which corresponds to *a* is 0, 1, or 2. Regarding the ratio of isocyanate-reactive groups to isocyanate groups, Schindler 2 teaches the preparation of the copolymer where the proportion of HA or OH groups (isocyanate0reactive groups) to NCO groups is 2 – 0.67 (the reciprocal of 0.5 – 1.5) (see col. 7, lines 44-51). This embraces formula [1] of the instant application. Since the main chain is not claimed in this application, the reference reads on the claimed invention.**

16. Regarding claims 13 and 14, Schindler 2 teaches **R<sup>1</sup>** is preferable methyl or ethyl (col. 5, lines 2—25), and **R''** is preferably methoxy, ethoxy or acetoxy (methyl, ethyl or acetyl in the instant application).

17. Regarding claims 16 and 17, Schindler 2 teaches the use of aminomethylmethyldimethoxysilane, which embrace the alkoxysilane (A2) (col. 7, lines 25). This also reads on (A2) where 50% of the groups attached to the silicon atom are alkoxy.

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18. Regarding claim 18-20, Schindler 2 teaches the preparation of aminoalkylpolydiorganosiloxanes (prepolymer (A)) using polypropylene glycols (A11) with molecular masses of up to more than 10,000 (col. 6, lines 48-62). The polypropylene glycols are hydroxyl-functional polyethers, which read on the invention as claimed.

19. Regarding claim 21, Schindler 2 teaches the preparation of prepolymer (A) using isophorene diisocyanate (IPDI), toluene 2,5-diisocyanate (TDI), and hexamethylene 1,6-diisocyanate (see col. 6, lines 28-39) .

### ***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 5,554,709.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin C. Collins whose telephone number is (571) 270-7734. The examiner can normally be reached on Monday through Thursday, 7:30 am - 5:00 pm EST and on alternate Fridays from 7:30 am - 4:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AC/

/Randy Gulakowski/  
Supervisory Patent Examiner, Art Unit 1796